

\*Held Secret Clearance (active as of 2024)

# REAZ W. RAHMAN

\*US Citizen

Software Engineer

(917) 995-3287 • RR3448@caa.columbia.edu • <https://www.linkedin.com/in/reaz-rahman12> • New York, NY

## Skills

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**Software & Tools:** Git, Jenkins (CI/CD), IBM Rhapsody, IBM DOORS, VxWorks, Visual Studio, Docker, Agile (Jira)

**Data & Analytics:** AWS, Kafka, Akka, Snowflake, Databricks, Apache Flink, Airflow, Relational DBs (PostgreSQL, MySQL), MongoDB

**Backend:** Python, Java, C++, SQL, Scala, Spring Boot, Flask, REST API, Microservices, ORM, AWS

**Front-end:** Angular, Typescript, Javascript, React, HTML, CSS (Personal Projects: [Fantasy Cricket](#), [DIY Thermostat](#))

## Education

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Boston University

Masters of Science in Software Development | GPA: **3.91** / 4.0

- Columbia University | GPA: **3.84** / 4.0 (Transferred)

Macaulay Honors College at City College of New York

Bachelors of Engineering in Electrical Engineering | GPA: **3.87** / 4.0

## Experience

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**Capital One**

New York, NY

Senior Software Engineer

10/2022 - Present

### System Architecture & 0-to-1 Product Delivery

- Spearheaded the 0-to-1 architectural design and launch of an enterprise-scale offer fulfillment platform, transitioning the system from discovery to a multi-phased production delivery for hundreds of thousands of concurrent customers.
- Designed reusable backend services across **Java**, **Scala**, and **Python**, applying clean architecture and design patterns adopted across multiple teams.
- Designed and implemented comprehensive unit, component, and scenario-based tests in a containerized environment (**Docker**, **Kubernetes**, ECS Fargate), enabling production-like validation of distributed services and ML-driven decisioning systems.

### Data Engineering & Backend Development

- Designed and executed extensive unit, component, and integration testing for distributed services, including virtualized APIs, live dependency testing, and **cross-region resiliency** validation to ensure reliable failover and disaster recovery behavior.
- Built and maintained data integrations from multiple enterprise systems including **relational databases**, **streaming platforms**, and **REST APIs** to support downstream analytics.
- Built production observability and data quality tooling using **OpenTelemetry** and **New Relic**, enabling validation of pipeline correctness, performance, and ML model behavior in production.

**L3Harris Technologies**

Clifton, NJ

Senior Associate Software Engineer

07/2020 - 10/2022

- Developed messaging-based communication services in **C++** for embedded systems, implementing protocols including **MilStd1553** and **APG83**, translating hardware datasheet specifications into robust software message definitions.
- Initiated and led the development of multiple automation programs in **Python**, reducing development time by 80% across 5 major projects, demonstrating significant cost savings and efficiency improvements (**est. savings 350K/year**).
- Developed messaging patterns (synchronous and pub-sub) for Electronic Counter Measure and Built-In Testing components, integrating hardware/firmware drivers and relational database APIs to enable reliable inter-service communication.

**Northrop Grumman**

Baltimore, MD

Software Engineering Intern

06/2019 - 02/2020

- Developed a tool to optimize Rapid Quantum Logic (RQL) circuit design parameters using machine learning algorithms, and built a Python-based user interface to enable engineers to configure experiments and analyze results.

## Projects

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- **Fantasy Cricket Site (Full-stack):** Angular, AWS Lambda, DynamoDB, Python, PostgreSQL, serverless microservices. [Link](#)
- **Machine Learning Cricket Prediction:** Python, ML, data science, feature engineering, model evaluation. [GitHub](#)
- **DIY Thermostat (Full-stack):** Javascript/React frontend, Flask/Python backend, concurrency, embedded hardware. [Link](#)
- **Stock Portfolio Management:** Java Swing GUI, Spring Boot API, concurrency, design patterns. [Link](#)